

(b) If you startup a new affected source on or before July 16, 2007, you must achieve compliance with the applicable provisions of this subpart not later than July 16, 2007.

(c) If you startup a new affected source after July 16, 2007, you must achieve compliance with the applicable provisions of this subpart upon startup of your affected source.

#### STANDARDS AND COMPLIANCE REQUIREMENTS

##### §63.11409 What are the standards?

(a) You must operate a capture system that collects the gases and fumes released during the operation of each emissions source listed in Table 1 of this subpart and conveys the collected gas stream to a particulate matter (PM) control device.

(b) You must not discharge to the atmosphere through any combination of stacks or other vents process gases from an emissions source listed in Table 1 of this subpart that contain PM in excess of the allowable process rate determined according to Equation 1 of this section (for an emissions source with a process rate of less than 30 tons per hour) or Equation 2 of this section (for an emissions source with a process rate of 30 tons per hour or greater). If more than one process vents to a common stack, the applicable emissions limit for the stack is the sum of allowable emissions calculated for each process using Equation 1 or 2 of this section, as applicable.

$$E = 4.1 \times P^{0.67} \quad (\text{Eq. 1})$$

Where:

E = Emissions limit in pounds per hour (lb/hr); and

P = Process rate of emissions source in tons per hour (ton/hr).

$$E = 55 \times P^{0.11} - 40 \quad (\text{Eq. 2})$$

##### §63.11410 What are the compliance requirements?

(a) *Existing sources.* If you own or operate an existing area source, you must comply with the requirements in paragraphs (b) through (e) of this section.

(b) *Initial control device inspection.* You must conduct an initial inspection

of each PM control device according to the requirements in paragraphs (b)(1) through (4) of this section. You must conduct each inspection no later than 60 days after your applicable compliance date for each installed control device which has been operated within 60 days of the compliance date. For an installed control device which has not been operated within 60 days of the compliance date, you must conduct an initial inspection prior to startup of the control device.

(1) For each baghouse, you must visually inspect the system ductwork and baghouse unit for leaks. You must also inspect the inside of each baghouse for structural integrity and fabric filter condition. You must record the results of the inspection and any maintenance action in the logbook required in paragraph (d) of this section. An initial inspection of the internal components of a baghouse is not required if an inspection has been performed within the past 12 months.

(2) For each dry electrostatic precipitator, you must verify the proper functioning of the electronic controls for corona power and rapper operation, that the corona wires are energized, and that adequate air pressure is present on the rapper manifold. You must also visually inspect the system ductwork and electrostatic precipitator housing unit and hopper for leaks and inspect the interior of the electrostatic precipitator to determine the condition and integrity of corona wires, collection plates, hopper, and air diffuser plates. An initial inspection of the internal components of a dry electrostatic precipitator is not required if an inspection has been performed within the past 24 months.

(3) For each wet electrostatic precipitator, you must verify the proper functioning of the electronic controls for corona power, that the corona wires are energized, and that water flow is present. You must also visually inspect the system ductwork and electrostatic precipitator housing unit and hopper for leaks and inspect the interior of the electrostatic precipitator to determine the condition and integrity of corona wires, collection plates, plate wash spray heads, hopper, and air diffuser

plates. An initial inspection of the internal components of a wet electrostatic precipitator is not required if an inspection has been performed within the past 24 months.

(4) For each wet scrubber, you must verify the presence of water flow to the scrubber. You must also visually inspect the system ductwork and scrubber unit for leaks and inspect the interior of the scrubber for structural integrity and the condition of the demister and spray nozzle.

(i) An initial inspection of the internal components of a wet scrubber is not required if an inspection has been performed within the past 12 months.

(ii) The requirement in paragraph (b)(4) of this section for initial inspection of the internal components of a wet scrubber does not apply to a cyclonic scrubber installed upstream of a wet or dry electrostatic precipitator.

(c) *Periodic inspections/maintenance.* Following the initial inspections, you must perform periodic inspections and maintenance of each PM control device according to the requirements in paragraphs (c)(1) through (4) of this section.

(1) You must inspect and maintain each baghouse according to the requirements in paragraphs (c)(1)(i) and (ii) of this section.

(i) You must conduct monthly visual inspections of the system ductwork for leaks.

(ii) You must conduct inspections of the interior of the baghouse for structural integrity and to determine the condition of the fabric filter every 12 months. If an initial inspection is not required by paragraph (b)(1) of this section, the first inspection must not be more than 12 months from the last inspection.

(2) You must inspect and maintain each dry electrostatic precipitator according to the requirements in paragraphs (c)(2)(i) through (iii) of this section.

(i) You must conduct a daily inspection to verify the proper functioning of the electronic controls for corona power and rapper operation, that the corona wires are energized, and that adequate air pressure is present on the rapper manifold.

(ii) You must conduct monthly visual inspections of the system ductwork, housing unit, and hopper for leaks.

(iii) You must conduct inspections of the interior of the electrostatic precipitator to determine the condition and integrity of corona wires, collection plates, plate rappers, hopper, and air diffuser plates every 24 months.

(3) You must inspect and maintain each wet electrostatic precipitator according to the requirements in paragraphs (c)(3)(i) through (iii) of this section.

(i) You must conduct a daily inspection to verify the proper functioning of the electronic controls for corona power, that the corona wires are energized, and that water flow is present.

(ii) You must conduct monthly visual inspections of the system ductwork, electrostatic precipitator housing unit, and hopper for leaks.

(iii) You must conduct inspections of the interior of the electrostatic precipitator to determine the condition and integrity of corona wires, collection plates, plate wash spray heads, hopper, and air diffuser plates every 24 months. If an initial inspection is not required by paragraph (b)(3) of this section, the first inspection must not be more than 24 months from the last inspection.

(4) You must inspect and maintain each wet scrubber according to the requirements in paragraphs (c)(4)(i) through (iii) of this section.

(i) You must conduct a daily inspection to verify the presence of water flow to the scrubber.

(ii) You must conduct monthly visual inspections of the system ductwork and scrubber unit for leaks.

(iii) You must conduct inspections of the interior of the scrubber to determine the structural integrity and condition of the demister and spray nozzle every 12 months. Internal inspections of cyclonic scrubbers installed upstream of wet or dry electrostatic precipitators are not required.

(d) *Recordkeeping requirements.* You must record the results of each inspection and maintenance action in a logbook (written or electronic format). You must keep the logbook onsite and make the logbook available to the permitting authority upon request. You

must keep records of the information specified in paragraphs (d)(1) through (4) of this section for 5 years following the date of each recorded action.

(1) The date and time of each recorded action for a fabric filter, the results of each inspection, and the results of any maintenance performed on the bag filters.

(2) The date and time of each recorded action for a wet or dry electrostatic precipitator (including ductwork), the results of each inspection, and the results of any maintenance performed on the electrostatic precipitator.

(3) The date and time of each recorded action for a wet scrubber (including ductwork), the results of each inspection, and the results of any maintenance performed on the wet scrubber.

(4) Records of all required monitoring data and supporting information including all calibration and maintenance records, original strip-chart recordings for continuous monitoring information, and copies of all reports required by this subpart. You must maintain records of required monitoring data in a form suitable and readily available for expeditious review. All records must be kept onsite and made available to EPA or the delegated authority for inspection upon request. You must maintain records of all required monitoring data and supporting information for at least 5 years from the date of the monitoring sample, measurement, report, or application.

(e) *Reports.* (1) You must report each deviation (an action or condition not in accordance with the requirements of this subpart, including upset conditions but excluding excess emissions) to the permitting agency on the next business day after becoming aware of the deviation. You must submit a written report within 2 business days which identifies the probable cause of the deviation and any corrective actions or preventative actions taken. All reports of deviations must be certified by a responsible official.

(2) You must submit semiannual reports of monitoring and recordkeeping activities to your permitting authority.

(3) You must submit the results of any maintenance performed on each PM control device within 30 days of a written request by the permitting authority.

(f) *New sources.* If you own or operate a new affected source, you must comply with the requirements in paragraphs (g) and (h) of this section.

(g) *Bag leak detection systems.* You must install, operate, and maintain a bag leak detection system on all baghouses used to comply with the PM emissions limit in §63.11409 according to paragraph (g)(1) of this section; prepare and operate by a site-specific monitoring plan according to paragraph (g)(2) of this section; take corrective action according to paragraph (g)(3) of this section; and record information according to paragraph (g)(4) of this section.

(1) Each bag leak detection system must meet the specifications and requirements in paragraphs (g)(1)(i) through (viii) of this section.

(i) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 0.00044 grains per actual cubic foot or less.

(ii) The bag leak detection system sensor must provide output of relative PM loadings. The owner or operator shall continuously record the output from the bag leak detection system using electronic or other means (e.g., using a strip chart recorder or a data logger).

(iii) The bag leak detection system must be equipped with an alarm system that will sound when the system detects an increase in relative particulate loading over the alarm set point established according to paragraph (g)(1)(iv) of this section, and the alarm must be located such that it can be heard by the appropriate plant personnel.

(iv) In the initial adjustment of the bag leak detection system, you must establish, at a minimum, the baseline output by adjusting the sensitivity (range) and the averaging period of the device, the alarm set points, and the alarm delay time.

(v) Following initial adjustment, you shall not adjust the averaging period, alarm set point, or alarm delay time

without approval from the Administrator or delegated authority except as provided in paragraph (g)(1)(vi) of this section.

(vi) Once per quarter, you may adjust the sensitivity of the bag leak detection system to account for seasonal effects, including temperature and humidity, according to the procedures identified in the site-specific monitoring plan required by paragraph (g)(2) of this section.

(vii) You must install the bag leak detection sensor downstream of the baghouse and upstream of any wet scrubber.

(viii) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

(2) You must develop and submit to the Administrator or delegated authority for approval a site-specific monitoring plan for each bag leak detection system. You must operate and maintain the bag leak detection system according to an approved site-specific monitoring plan at all times. Each monitoring plan must describe the items in paragraphs (g)(2)(i) through (vi) of this section.

(i) Installation of the bag leak detection system;

(ii) Initial and periodic adjustment of the bag leak detection system, including how the alarm set-point will be established;

(iii) Operation of the bag leak detection system, including quality assurance procedures;

(iv) How the bag leak detection system will be maintained, including a routine maintenance schedule and spare parts inventory list;

(v) How the bag leak detection system output will be recorded and stored; and

(vi) Corrective action procedures as specified in paragraph (g)(3) of this section. In approving the site-specific monitoring plan, the Administrator or delegated authority may allow owners and operators more than 3 hours to alleviate a specific condition that causes an alarm if the owner or operator identifies in the monitoring plan this specific condition as one that could lead to an alarm, adequately explains why it is not feasible to alleviate this con-

dition within 3 hours of the time the alarm occurs, and demonstrates that the requested time will ensure alleviation of this condition as expeditiously as practicable.

(3) For each bag leak detection system, you must initiate procedures to determine the cause of every alarm within 1 hour of the alarm. Except as provided in paragraph (g)(2)(vi) of this section, you must alleviate the cause of the alarm within 3 hours of the alarm by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to the following:

(i) Inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in particulate emissions;

(ii) Sealing off defective bags or filter media;

(iii) Replacing defective bags or filter media or otherwise repairing the control device;

(iv) Sealing off a defective baghouse compartment;

(v) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; or

(vi) Shutting down the process producing the particulate emissions.

(4) You must maintain records of the information specified in paragraphs (g)(4)(i) through (iii) of this section for each bag leak detection system.

(i) Records of the bag leak detection system output;

(ii) Records of bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection system settings; and

(iii) The date and time of all bag leak detection system alarms, the time that procedures to determine the cause of the alarm were initiated, the cause of the alarm, an explanation of the actions taken, the date and time the cause of the alarm was alleviated, and whether the alarm was alleviated within 3 hours of the alarm.

(h) *Other control devices.* If you use a control device other than a baghouse, you must prepare and submit a monitoring plan to EPA or the delegated authority for approval. You must operate

and maintain the control device according to an approved site-specific monitoring plan at all times. Each plan must contain the information in paragraphs (h)(1) through (5) of this section.

(1) A description of the device;

(2) Test results collected in accordance with paragraph (i) of this section verifying the performance of the device for reducing PM to the levels required by this subpart;

(3) Operation and maintenance plan for the control device (including a preventative maintenance schedule consistent with the manufacturer's instructions for routine and long-term maintenance) and continuous monitoring system.

(4) A list of operating parameters that will be monitored to maintain continuous compliance with the applicable emissions limits; and

(5) Operating parameter limits based on monitoring data collected during the performance test.

(i) *Performance tests.* If you own or operate a new affected source, you must conduct a performance test for each emissions source subject to an emissions limit in §63.11409(b) within 180 days of your compliance date and report the results in your notification of compliance status. If you own or operate an existing affected source, you are not required to conduct a performance test if a prior performance test was conducted within the past 5 years of the effective date using the same methods specified in paragraph (j) of this section and either no process changes have been made since the test, or if you can demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process changes.

(j) *Test methods.* You must conduct each performance test according to the requirements in §63.7 and paragraphs (j)(1) through (3) of this section.

(1) Determine the concentration of PM according to the following test methods in 40 CFR part 60, appendix A:

(i) Method 1 or 1A to select sampling port locations and the number of traverse points in each stack or duct. Sampling sites must be located at the outlet of the control device and prior to any releases to the atmosphere.

(ii) Method 2, 2A, 2C, 2D, 2F, or 2G to determine the volumetric flow rate of the stack gas.

(iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas. You may use ANSI/ASME PTC 19.10-1981, "Flue and Exhaust Gas Analyses (incorporated by reference—see §63.14) as an alternative to EPA Method 3B.

(iv) Method 4 to determine the moisture content of the stack gas.

(v) Method 5 or 5D to determine the concentration of particulate matter (front half filterable catch only). Three valid test runs are needed to comprise a performance test.

(2) During the test, you must operate each emissions source within  $\pm 10$  percent of the normal process rate specified in your notification of compliance status. You must monitor and record the process rate during the test.

(3) Compute the mass emissions (E) in pounds per hour (lb/hr) for each test run using Equation 1 of this section and the process rate measured during the test. The PM emissions in lb/hr must be less than the allowable PM emissions rate for the emissions source.

$$E = \frac{C \times Q}{K} \quad (\text{Eq. 1})$$

Where:

E = Mass emissions of PM, pounds per hour (lb/hr);

C = Concentration of PM, grains per dry standard cubic foot (gr/dscf);

Q = Volumetric flow rate of stack gas, dry standard cubic foot per hour (dscf/hr); and

K = Conversion factor, 7,000 grains per pound (gr/lb).

(k) *Startups, shutdown, and malfunctions.* The requirements in paragraphs (k)(1) and (2) of this section apply to the owner or operator of a new or existing affected source.

(1) Except as provided in paragraph (k)(2) of this section, you must report emissions in excess of a PM emissions limit established by this subpart lasting for more than 4 hours that result from a malfunction, a breakdown of process or control equipment, or any other abnormal condition by 9 a.m. of the next business day of becoming

aware of the occurrence. You must provide the name and location of the facility, the nature and cause of the malfunction or breakdown, the time when the malfunction or breakdown is first observed, the expected duration, and the estimated rate of emissions. You must also notify EPA or the delegated authority immediately when corrected measures have been accomplished and, if requested, submit a written report within 15 days after the request.

(2) As an alternative to the requirements in paragraph (k)(1) of this section, you must comply with the startup, shutdown, and malfunction requirements in § 63.6(e)(3).

[72 FR 38905, July 16, 2007, as amended at 73 FR 15928, Mar. 26, 2008]

OTHER REQUIREMENTS AND INFORMATION

**§ 63.11411 What General Provisions apply to this subpart?**

(a) You must comply with the requirements of the General Provisions in 40 CFR part 63, subpart A as specified in Table 2 to this subpart.

(b) Your notification of compliance status required by § 63.9(h) must include the following information for a new or existing affected source:

(1) This certification of compliance, signed by a responsible official, for the standards in § 63.11409(a): “This facility complies with the management practice requirements in § 63.11409(a) for installation and operation of capture systems for each emissions source subject to an emissions limit in § 63.11409(b).”

(2) This certification of compliance by the owner or operator of an existing source (if applicable), signed by a responsible official, for the emissions limits in § 63.11409(b): “This facility complies with the emissions limits in § 63.11409(b) based on a previous performance test in accordance with § 63.11410(i).”

(3) The process rate for each emissions source subject to an emissions limit in § 63.11409(b) that represents normal and representative production operations.

(4) The procedures used to measure and record the process rate for each emissions source subject to an emissions limit in § 63.11409(b).

(5) This certification of compliance by the owner or operator of an existing affected source, signed by a responsible official, for the control device inspection and maintenance requirements in § 63.11410(b) through (d): “This facility has conducted an initial inspection of each control device according to the requirements in § 63.11410(b), will conduct periodic inspections and maintenance of control devices in accordance with § 63.11410(c), and will maintain records of each inspection and maintenance action in the logbook required by § 63.11410(d).”

(6) This certification of compliance by the owner or operator of a new affected source, signed by a responsible official, for the bag leak detection system monitoring plan requirement in § 63.11410(g)(2): “This facility has an approved bag leak detection system monitoring plan in accordance with § 63.11410(g)(2).”

(7) Performance test results for each emissions unit at a new affected source (or each emissions source at an existing affected source if a test is required) in accordance with § 63.11410(j). The performance test results for a new affected source must identify the daily average parameter operating limit for each PM control device.

(8) If applicable, this certification of compliance by the owner or operator of a new or existing source, signed by a responsible official, for the requirement in paragraph (k)(2) of this section to comply with the startup, shutdown, and malfunction provisions in 40 CFR 63.6(e)(3): “This facility has prepared a startup, shutdown, and malfunction plan in accordance with 40 CFR 63.6(e)(3).”

**§ 63.11412 What definitions apply to this subpart?**

Terms used in this subpart are defined in the CAA, in 40 CFR 63.2, and in this section as follows:

*Bag leak detection system* means a system that is capable of continuously monitoring relative particulate matter (dust loadings) in the exhaust of a baghouse to detect bag leaks and other upset conditions. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, light scattering, light